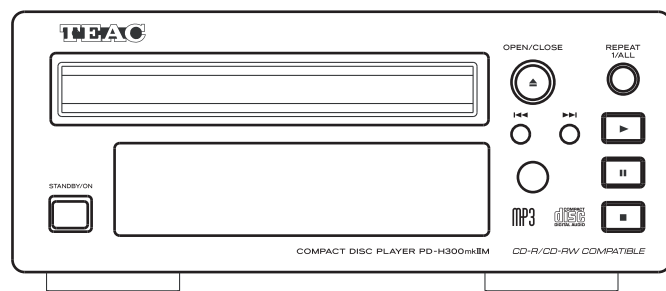


TEAC



SERVICE MANUAL

PD-H300mk IIM

Compact Disc Player

COMPACT
disc
DIGITAL AUDIO

MP3 WMA

PD-H300mk IIM : EUR

CONTENTS

1	SPECIFICATIONS	2
2	IC SPECIFICATIONS	3
3	EXPLODED VIEWS AND PARTS LIST	7
4	PC BOARDS AND PARTS LIST	9
5	INCLUDED ACCESSORIES	13
6	REMOTE CONTROL LAYOUT	13
7	SCHEMATIC DIAGRAMS	14

NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. They must be replaced with identical components – refer to the appropriate parts list and ensure exact replacement.

Preliminary
暫定版

1 SPECIFICATIONS

CD Player

Pickup	3-beam, semiconductor laser
Frequency Response	20 Hz - 20 kHz \pm 2dB
Total Harmonic Distortion	Less than 0.02 % (1 kHz)
Signal-to-Noise Ratio (S/N)	More than 90 dB (IHF-A)
Outputs	Analog: RCA x 1set Digital: TOS OPTICAL
Input/Output	Remote control connection x 2(RCA)
Output level	Analog: 2.0 Vrms
Playable Disc	CD-DA/CD-R/CD-RW
Playable format	CD-DA/MP3/WMA

General

Power Requirement	AC 230 V, 50 Hz
Power Consumption	13 W
Dimensions (W x H x D)	215 x 93 x 305 mm
Weight (Net)	2.8 kg
Operating temperature	+5° C - +35° C
Operating humidity	5% to 85% (no condensation)
Storage temperature	-20° C - +55° C

Note:

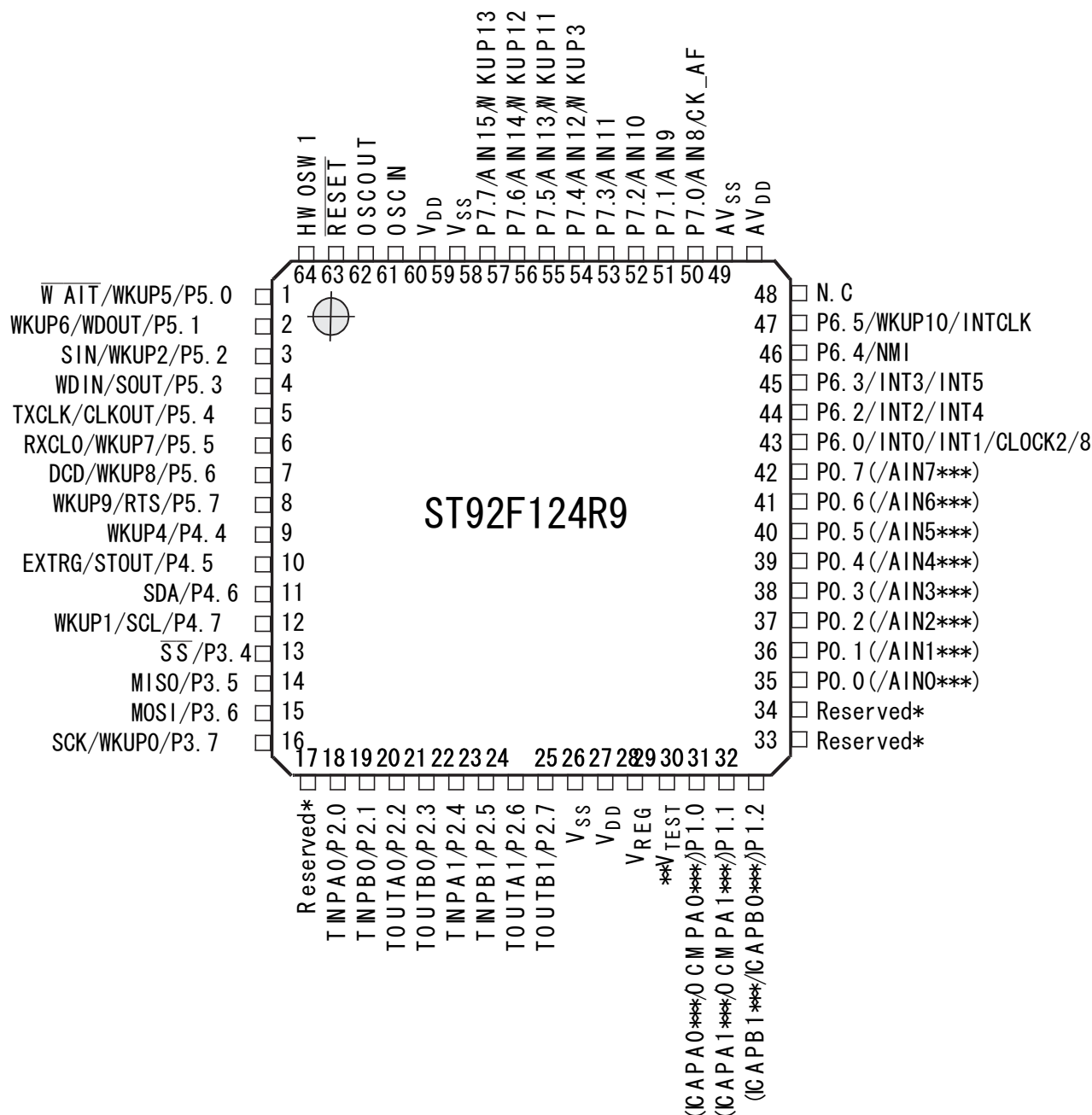
- This unit can play MP3 files with sampling frequency 44.1 kHz or 48 kHz, bit-rate 320 kbps or less.
- This unit can play WMA files with sampling frequency 44.1kHz, bit-rate 192 kbps or less.
- Design and specifications are subject to change without notice.
- Weight and dimensions are approximate.
- Illustrations may differ slightly from production models.

Standard Accessory

- RCA cable x 1
- Remote control connection cord (RCA) x 1
- Remote control unit (RC-1039) x 1
- Batteries (AA) x 2
- Owner' s manual x 1
- Warranty card x 1

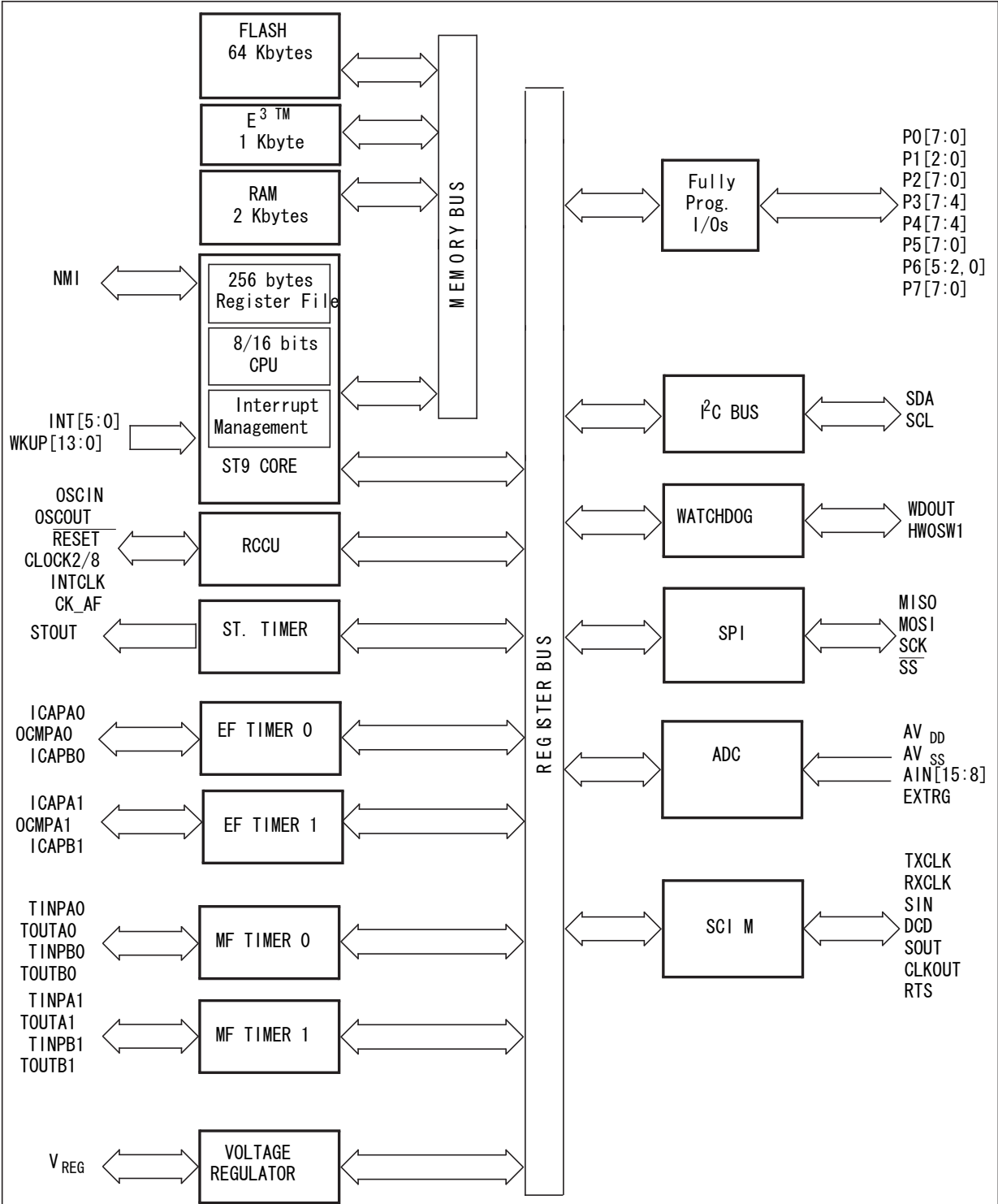
2 IC SPECIFICATIONS

HOST MICROCOMPUTER:ST92F124R9



HOST MICROCOMPUTER:ST92F124R9

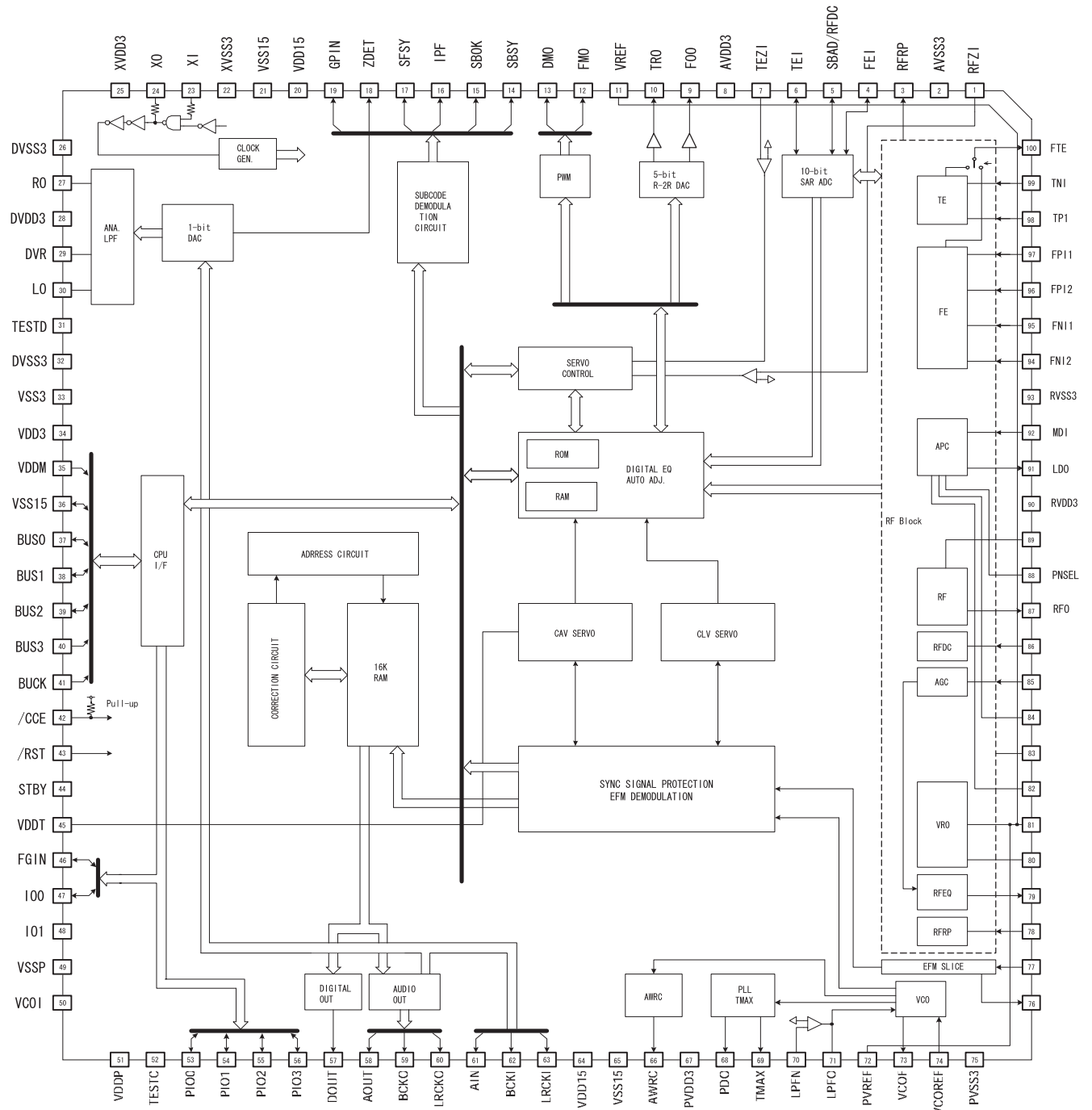
ST92F124R9: Architectural Block Diagram



The alternate functions (italic characters) are mapped on Port 0, Port 1, Port 2, Port 3, Port 4, Port 5, Port 6 and Port 7.

CD Block System:TC94A54MFG

Pin Configuration and Block Diagram



Power Driver IC for CD Player: TA2125AF

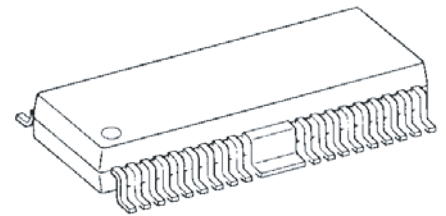
TA2125AF is power driver IC developed for CD players.

This IC have built-in 4 channel BTL power amplifiers and 1 channel H-Bridge driver.

Which drives focus-coil and tracking coil for 3-beam pick-up head, disc motor, feed motor and loading motor.

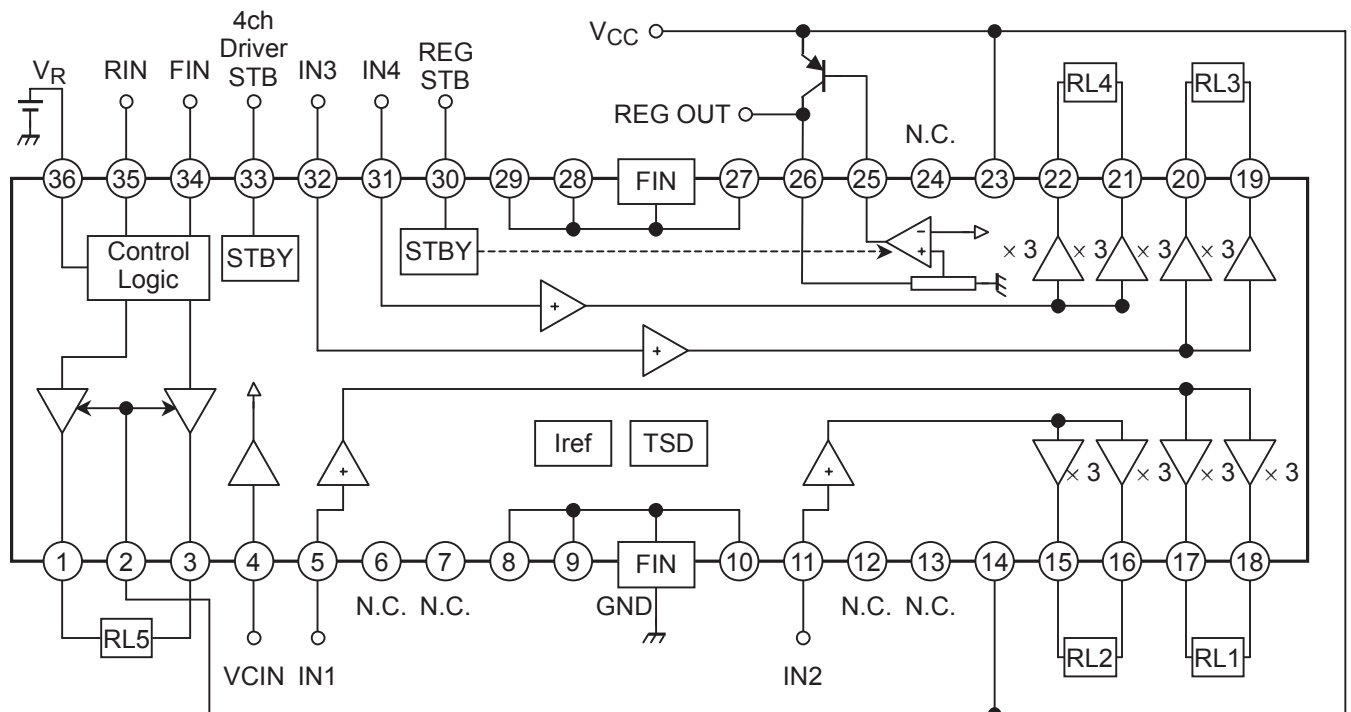
Featuers

- 4 channel BTL linear drivers
High output power: $V_{out} = 5.1 V_{p-p}$ ($V_{CC} = 8 V$, $R_L = 8 \Omega$)
Stand-by switch for BTL drivers
- 1 channel H-Bridge: $V_{CE} (H) + V_{CE} (L) = 1.3 V$ ($V_R = V_M = 8 V$, $I_O = 200 mA$)
Logic control (forward, revers, brake, stand-by)
- Punch through current restriction diode for H-bridge
- 5 V regulator reference amp (with external output Tr.)
- Thermal shut down protection
- Operating supply voltage range: $V_{CC} = 5.0-9.0 V$

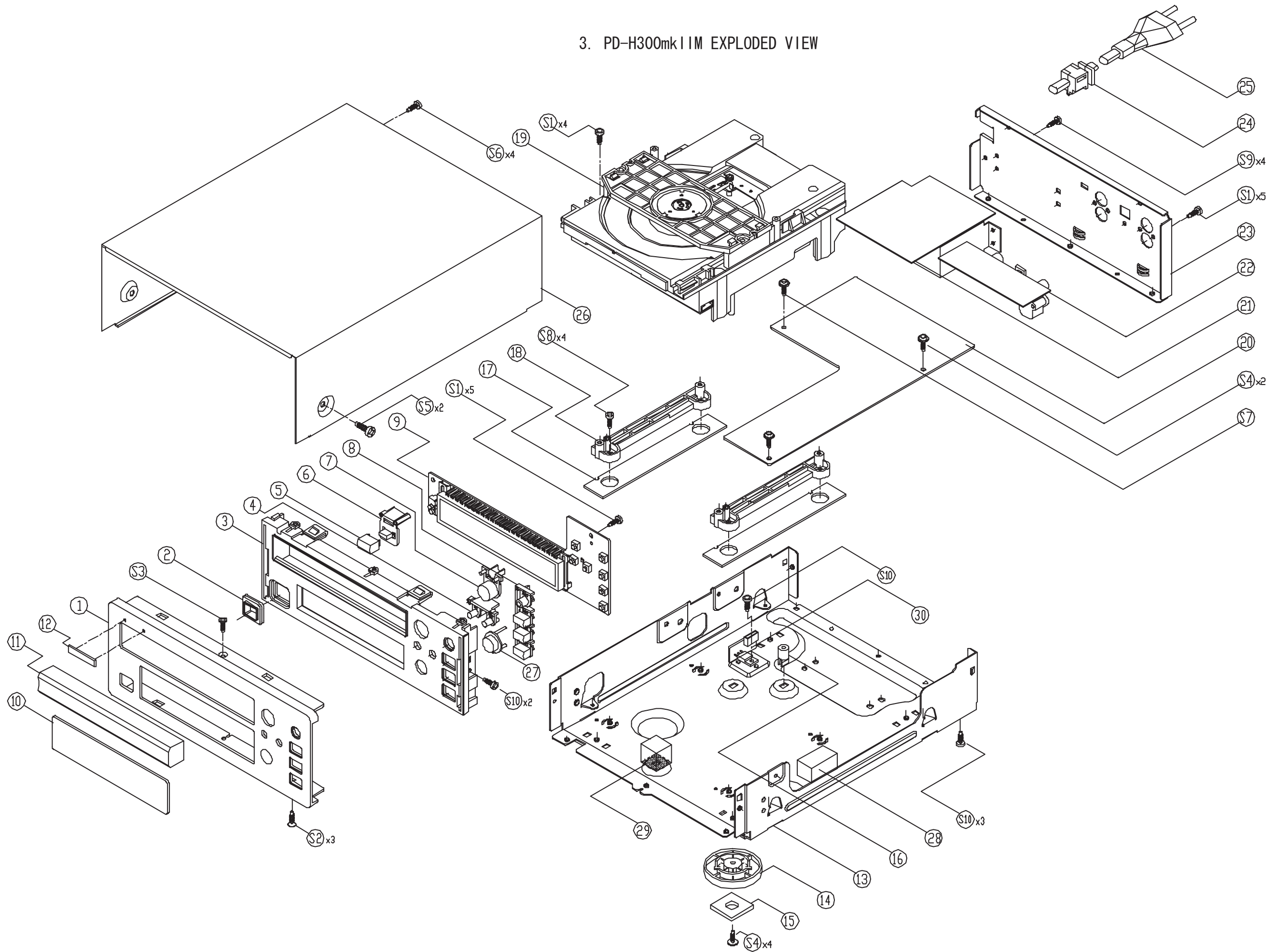


HSOP36-P-375-0.80

Block Diagram



3. PD-H300mk IIM EXPLODED VIEW



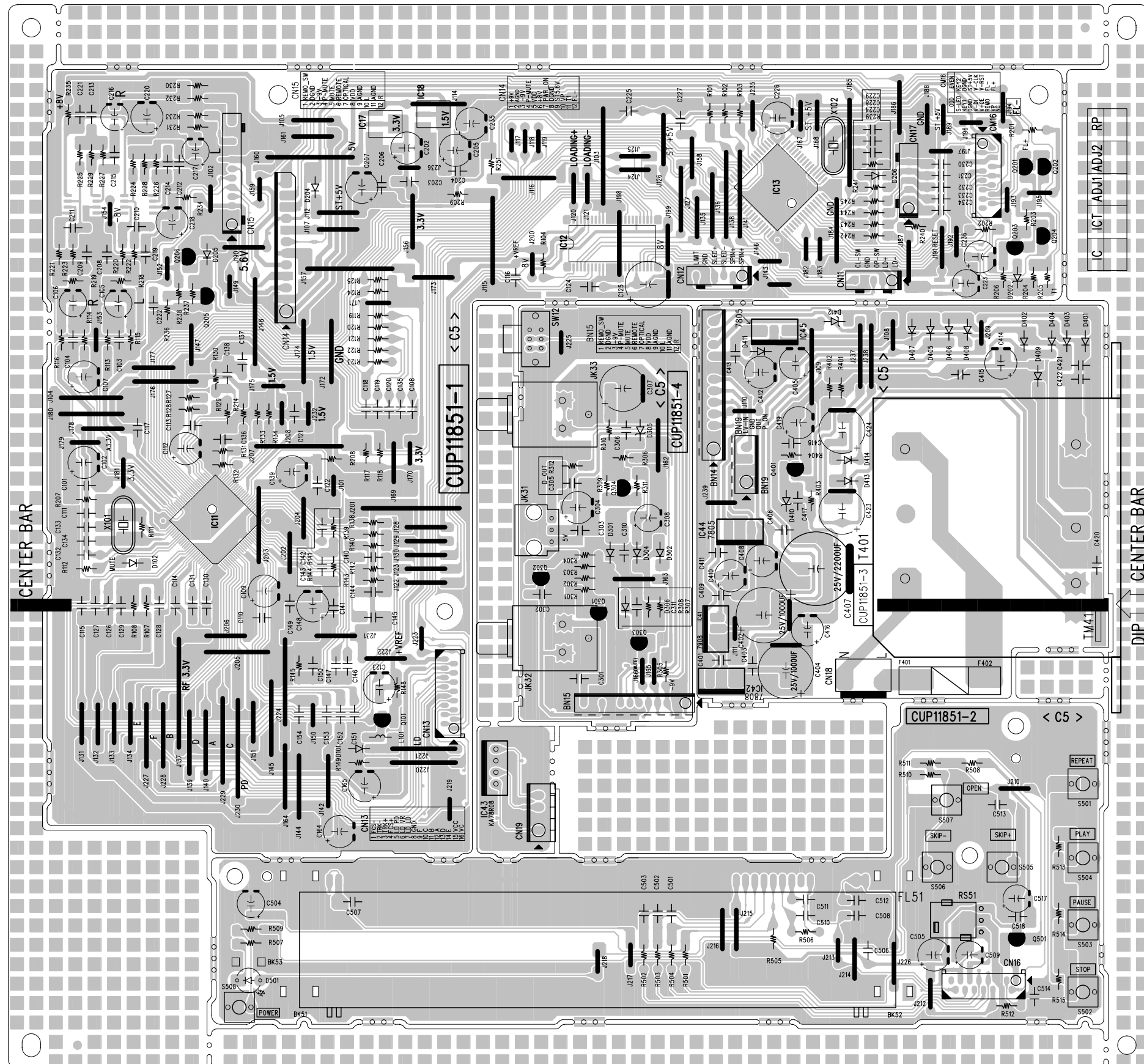
PD-H300mk II M

EXPLODED VIEW LIST (PD-H300mk IIM)

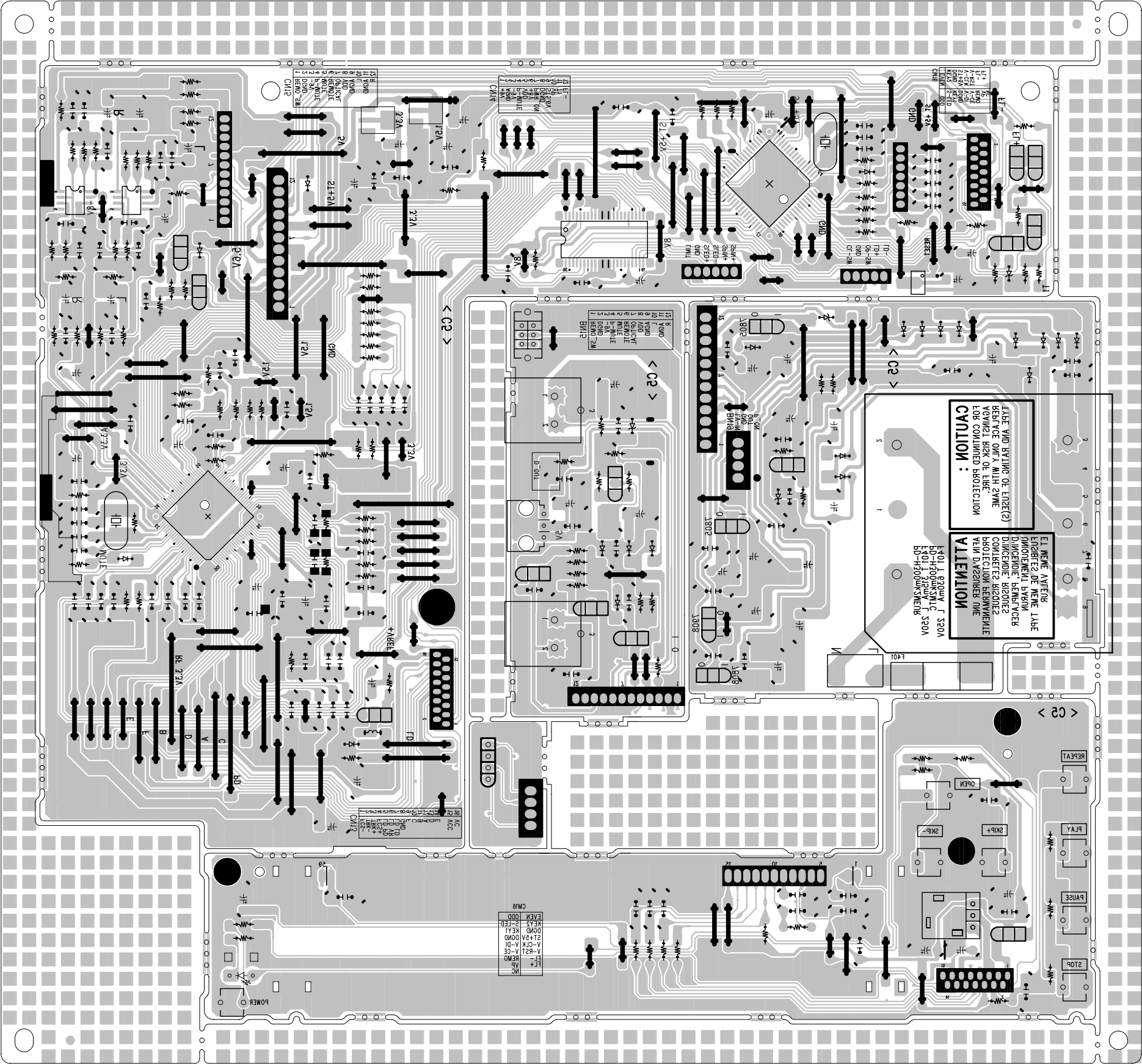
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1	CKM2A073ZC35	FRONT PANEL (AL)	
2	CGL1A133	LED INDICATOR	
3	CGW2A217M7ZG5	SUB PANEL	
4	CBT1A493MBC22	CPS KNOB	
5	CBT1A495M7G5	STANDBY CAP	
6	CBT1A483	STANDBY KNOB	
7	CBT1A385M7XG5	OPEN CLOSE KNOB	
8	CBT1A494M7WG5	OPERATION KNOB	
9	COP11851C	FRONT PCB	
10	CGU1A154Y	FIP WINDOW	
11	CGR1A350M7G5	TRAY ORNAMENT	
12	KGB1A047Z	BADGE	
13	CUA2A158	BOTTOM CHASSIS	
14	CKL2A055H45	FOOT	
15	KHG1A05DY	FOOT CUSHION	
16	CHE1A023	PCB SUPPORT	
17	KHG1A135	RUBBER, SUPPORT	
18	CMH1A074	MECHA SUPPORT	
19	CJDKSL2130CCM	MECHANISM	
20	COP11851C	MAIN PCB	
21		PCB (TRANS)	
22		PCB (INOUT)	
23	GKF2A154Z	REAR PANEL	
24	KHR1A02B	AC CORD BUSHING	
25	⚠ CJA2B043ZA	AC CORD	
26	GKC1B089S35	TOP CABINET	
27	CGU1A261A8	SENSOR WINDOW	
28	CHG1A054	CUSHION	
29	CHG1A157	CUSHION	
30		IC PCB	
S1	CTB3+10G	SCREW	
S2	CTS3+8JFC	SCREW	
S3	CTS3+10G	SCREW	
S4	CTW3+8J	SCREW	
S5	CTB4+6FFC	SCREW	
S6	CTB3+8JFC	SCREW	
S7	CTW3+16G	SCREW	
S8	CHD5A009	SCREW	
S9	CTB3+8JFZ	SCREW	
S10	CTB3+6J	SCREW	

4 PC BOARDS AND PARTS LIST

MAIN PCB (TOP VIEW)



MAIN PCB (VIEW FROM TOP SIDE)



MAIN PCB ASSY (1/4)

REF. NO.	PARTS NO.	DESCRIPTION
	COP11851B CUP11851Z CCEA1AH101T CCEA1CH101T	MAIN+FRONT PCB ASS'Y (PD-H300MK2M) PCB, MAIN+FRONT CAP, ELECT CAP, ELECT
C165, 207 C123, 164, 226 235, 408, 410, 412 C218 C125, 307 C102, 109, 112 112, 139, 148	CCEA1CH220T CCEA1CH221T CCEA1CH470T	CAP, ELECT CAP, ELECT CAP, ELECT
202, 205, 304 C423, 424 C505 C220, 236 C216-217, 223	CCEA1CH471T CCEA1CKS101T CCEA1EH101T CCEA1HH100T	CAP, ELECT CAP, ELECT CAP, ELECT CAP, ELECT
C416 C107-419 C405 C105-106, 308 C509, 517	CCEA1HH101T CCEA1HH220T CCEA1HH470T CCEA1HH4R7T CCEA1HKS100T	CAP, ELECT CAP, ELECT CAP, ELECT CAP, ELECT CAP, ELECT
C504 C414 C212-213 C103-104, 138 301-302	CCEA1HKS1ROT CCEA1JH470TS HCBS1C152MXT HCBS1C222MXT	CAP, ELECT CAP, ELECT CAP, CERAMIC CAP, CERAMIC
C146, 208-209 C222, 230-234 C108-111, 137 113-117, 121, 122, 142, 143,	HCBS1C472MXT HCBS1H101KBT HCBS1H103ZFT	CAP, CERAMIC CAP, CERAMIC CAP, CERAMIC
145, 219, 221, 224 C101-110, 124, 132, 136, 141, 147, 149, 151,	HCBS1H104ZFT	CAP, CERAMIC
153, 203-204 206, 225, 303, 306, 310-311, 401, 403, 406, 409, 411, 413		
C415, 417-418, 420-422, 506 507-508, 512 513-514, 518 C118-120, 133	HCBS1H104ZFT HCBS1H120JCT	CAP, CERAMIC CAP, CERAMIC
134-135, 305 C228-229 C140, 152 C210-211 C214-215	HCBS1H150JCT HCBS1H153KBT HCBS1H181KBT HCBS1H271KBT	CAP, CERAMIC CAP, CERAMIC CAP, CERAMIC CAP, CERAMIC
C130-131 C144, 501-503 C510-511 C128-129 C126-127	HCBS1H333ZFT HCBS1H470JT HCBS1H470JT HCBS1H471KBT HCBS1H473ZFT	CAP, CERAMIC CAP, CERAMIC CAP, CERAMIC CAP, CERAMIC CAP, CERAMIC
C227 C154 C150 D101-102, 204, 205-206, 301,	HCBS1H561KBT HCBS1H680JT HCBS1H681KBT HVD1SS133MT	CAP, CERAMIC CAP, CERAMIC CAP, CERAMIC DIODE

MAIN PCB ASSY (2/4)

REF. NO.	PARTS NO.	DESCRIPTION
302-304, 306, 411 D202 D305 D501	HVD1SS133MT HVDMTZJ5. 1BT HVDMTZJ9. 1BT HVD342YCTB7T089	DIODE DIODE, ZENER DIODE, ZENER L. E. D, YELLOW
D401-409, 413, 414 D410 D412 F401-402	KVD1N4003SRT HVDMTZJ30BT HVDMTZJ6. 2BT KJCFCS	DIODE DIODE, ZENER DIODE, ZENER HOLDER, FUSE
L101 Q101, 304 Q201 Q202 Q203	HLQ02G100KT HVTKTA1266YT HVTKTC3203YT HVTKSC2316YT HVTKSA1175YT	COIL, AXAIL T. R T. R T. R T. R
Q204 Q205, 303 Q206, 501 Q301-302 Q401	HVTKSC2785YT HVTKRA104MT HVTKRC107MT HVTKTD1302T HVTKSA916YT	T. R T. R T. R T. R T. R
R101-103 R104 R107 R108, 311, 506 R111	CRD20TJ183T CRD20TJ471T CRD20TJ682T CRD20TJ332T CRD20TJ105T	RES, CARBON RES, CARBON RES, CARBON RES, CARBON RES, CARBON
R112, 127-129, 131-134 R113-114 R115-116, 202, 206, 240, 508,	CRD20TJ104T CRD20TJ271T CRD20TJ103T	RES, CARBON RES, CARBON RES, CARBON
512 R130, 234-235, 310, 502-504 R139 R140-149, 207-	CRD20TJ221T CRD20TJ154T CRD20TJ1R0T	RES, CARBON RES, CARBON RES, CARBON
209, 214 R141, 145, 236 R142, 228-229 R143, 230-231, 237, 404	CRD20TJ223T CRD20TJ153T CRD20TJ473T	RES, CARBON RES, CARBON RES, CARBON
R144 R148, 239, 312 R201, 203 R204 R205, 232, 233,	CRD20TJ683T CRD20TJ100T CRD20TJ222T CRD20TJ101T CRD20TJ102T	RES, CARBON RES, CARBON RES, CARBON RES, CARBON RES, CARBON
238, 306, 401, 402, 501, 505, 511, 515 R218-221 R222-223, 226-	CRD20TJ392T CRD20TJ822T	RES, CARBON RES, CARBON
227 R224-225 R241-245 R301, 304, 307- 308	CRD20TJ123T CRD20TJ470T CRD20TJ472T	RES, CARBON RES, CARBON RES, CARBON
R302-303, 309 R117-125, 138, 251 R305 R403	CRD20TJ474T CRD20TJ562T CRD20TJ224T CRD20TJ122T	RES, CARBON RES, CARBON RES, CARBON RES, CARBON

PD-H300mk II M

MAIN PCB ASSY (3/4)

REF.NO.	PARTS NO.	DESCRIPTION
R507	CRD20TJ151T	RES, CARBON
R510-514	CRD20TJ152T	RES, CARBON
R509-513	CRD20TJ182T	RES, CARBON
S501-508	CST1A0122T	SW, TACT
	C8ESM800	FLUX
	H2K31161	SOLDER, WIRE
	H2K50301	SOLDER, BAR
	K4FH300	TAPE, PROTECTIVE
	K4FM073	TAPE, BOTH SIDE
BK51-52	CMD1A209	BRACKET, FLT
BK53	CMD1A376	SUPPORT, LED
BN14	CWB1C912160BM	WIRE ASS'Y
BN15	CWZPDH300MKBN15	WIRE ASS'Y (L, R-SHIELD)
BN19	CWB1C904100BM	WIRE ASS'Y
CM16	CJP15GA117ZY	WAFER, CARD CABLE
CN11	CJP05GA19ZY	WAFER, STRAIGHT, 5PIN
CN12	CJP06GA19ZY	WAFER, STRAIGHT, 6PIN
CN13	CJP16GA117ZY	WAFER
CN14	CJP12GA01ZY	WAFER
CN15	CJP12GA19ZY	WAFER
CN16	CJP15GA117ZY	WAFER, CARD CABLE
CN17	CJP07GA19ZY	WAFER, STRAIGHT, 7PIN
CN18	CJP02KA060ZY	WAFER
CN19	CJP04GB03ZY	WAFER
C402, 404	CCEA1EH102E	CAP, ELECT

MAIN PCB ASSY (4/4)

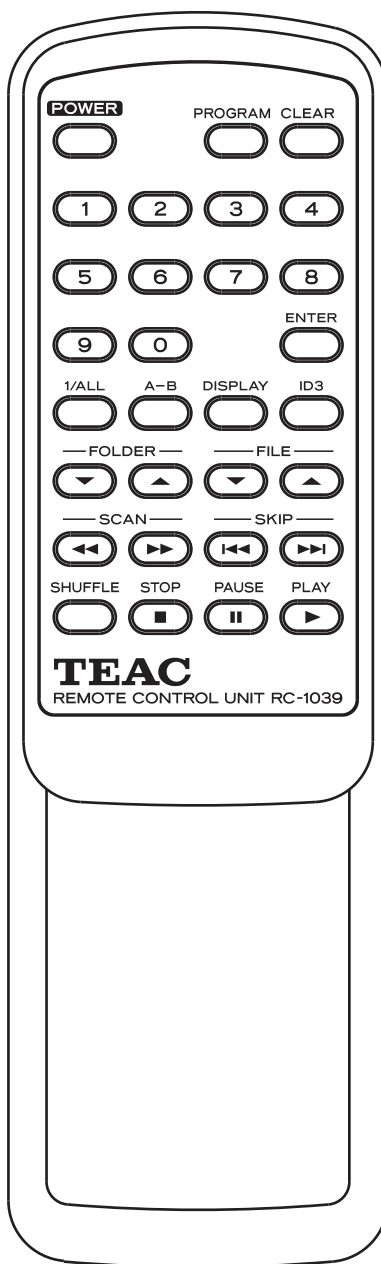
REF.NO.	PARTS NO.	DESCRIPTION
C407	CCEA1EH222E	CAP, ELECT
FL51	HFLHCA16SM11T	F. I. P, DVD RECODER
IC11	HVITC94A54MFG01	I. C, DIGITAL SERVO (CD/MP3/WMA)
IC12	HVITA2125AF	I. C, MOTOR DRIVER
IC13	HVIST92F124R9T6	I. C, MCU (FLASH 64K , TQFP64)
IC14-15	HVINJM2068MDTE1	I. C, OP AMP
IC16	HVIRH5VT28C	I. C, RESET
IC17	HVILM1117S-3V3	I. C, REGULATOR (3.3V)
IC18	HVILM1117S-1V5	I. C, L. D. O REGULATOR 1.5V FIXED
IC41-42	HVKA7908A	I. C
IC43	HVKA78R08	I. C, REGULATOR
IC44-45	HVIMC7805C	I. C, REGULATOR
JK31	HJST0TX177L	MODULE, OPTICAL (TX)
JK32	CJJ4N031Z	JACK, BOARD
JK33	CJJ4N032Z	JACK, BOARD
RS51	KRVH1MF802H3-2	REMOTE CONTROL UNIT
SW12	KSS2B016Z	SWITCH, SLIDE
TM41	CMC1A111	PLATE, EARTH
T401	CLT5M021YE	TRNAS, POWER (EUR)
X101	HOX16934A120C	CRYSTAL
X102	HOX04000E150C	CRYSTAL, 4MHZ

5 INCLUDED ACCESSORIES

INCLUDED ACCESSORIES

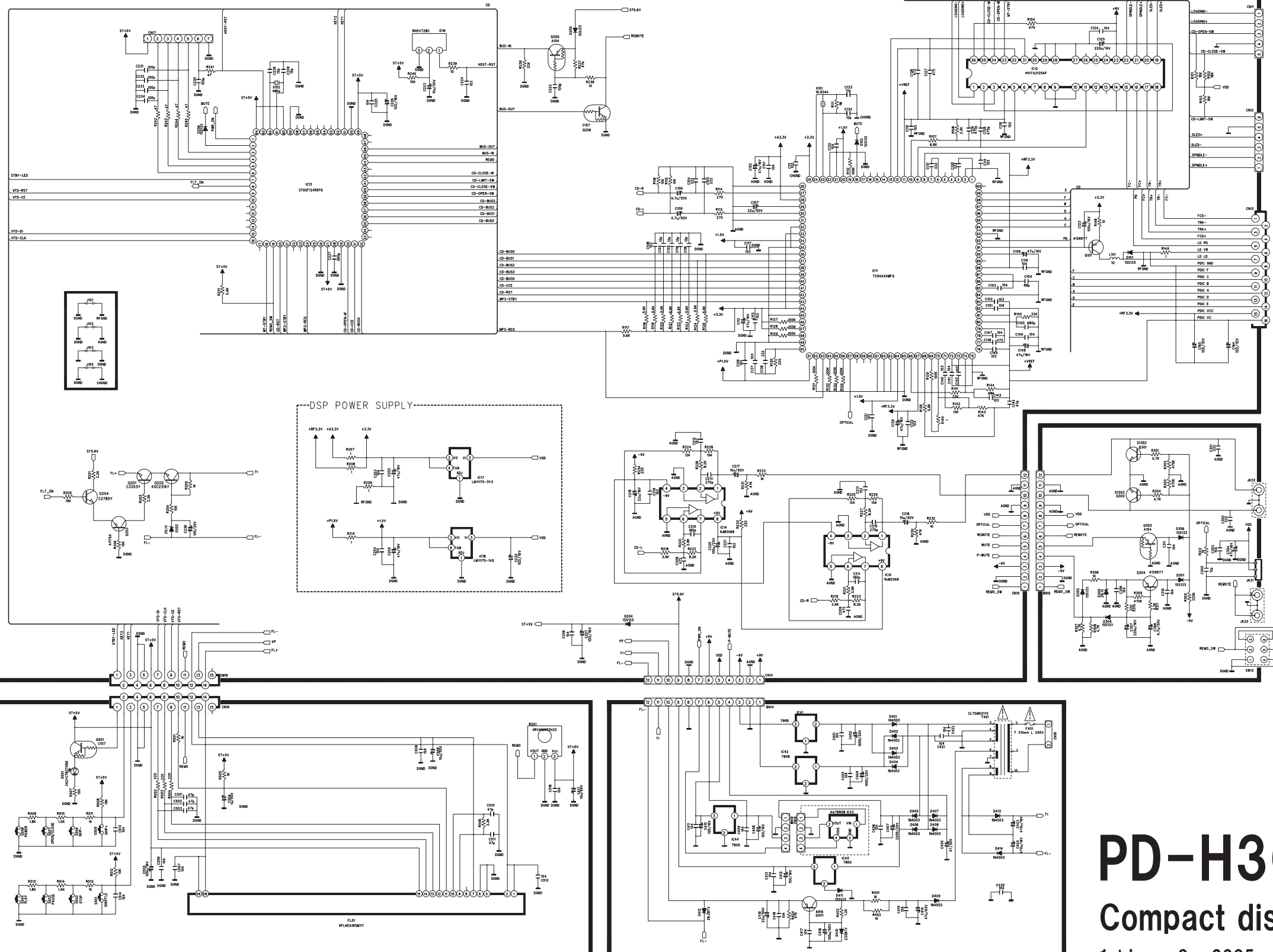
REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
	CARTPDH300MK2M	REMOCON	RC-1039
	CJS4M016Z	CORD, PIN (1WAY)	1-WAY / RCA Black
	CJS4N001Y	CORD, PIN	2-WAY / RCA Red/White
	CQX1A1067Z	INSTRUCTION MANUAL	9A10356300 E/F/S
	CQX1A1068Z	INSTRUCTION MANUAL	9A10356400 G/I/NL
	CQX1A645X	WARRANTY CARD	
	HABAAM1.5V	BATTERY	AA (R6) x2

6 REMOTE CONTROL LAYOUT



TEAC CORPORATION	3-7-3, Nakacho, Musashino-shi, Tokyo 180-8550, Japan	Phone: (0422) 52-5081
TEAC AMERICA, INC.	7733 Telegraph Road, Montebello, California 90640	Phone: (323) 726-0303
TEAC CANADA LTD.	5939 Wallace Street, Mississauga, Ontario L4Z 1Z8, Canada	Phone: (905) 890-8008
TEAC MEXICO, S.A. De C.V.	Campeños N° 184, Colonia Granjas Esmeralda, Delegación Iztapalapa, CP 09810, México DF	Phone: (525) 581-5500
TEAC UK LIMITE	Unit 19 & 20, The Courtyards, Hatters Lane, Watford, Hertfordshire, WD18 8TE, U.K.	Phone: (0845) 130-2511
TEAC EUROPE GmbH	Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany	Phone: 0611-71580
TEAC ITALIANA S.p.A.	Via C. Cantù 9/A, 20092 Cinisello Balsamo, Milano, Italy	Phone: 02-66010500
TEAC AUSTRALIA PTY., LTD.	280 William Street, Melbourne VIC 3000, Australia	Phone: (03) 9672-2400
A.B.N. 80 005 408 462		

—SCHEMATIC DIAGRAM



PD-H300mk II M

Compact disc player

1st Issue: Sep.2005

